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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,438	08/07/2003	Gavin Brebner	500200905-2	8555

22879 7590 03/28/2006

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

MOON, SEOKYUN

ART UNIT PAPER NUMBER

2629

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/635,438	BREBNER, GAVIN	
	Examiner	Art Unit	
	Seokyun Moon	2675	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-12, 14, and 15** are rejected under 35 U.S.C. 102(e) as being anticipated by Lenchik et al. (U.S. Pat. No. 6,658,272 B1, herein after referred to as "Lenchik").

As to **claim 1**, Lenchik [*Figs. 1*] teaches a context detecting apparatus ("*second electronic element 106*") comprising:

a housing (the cover member of "*second electronic element 106*") shaped to allow the apparatus to be positioned in a plurality of orientations [*Figs. 1-8*] each corresponding to at least one particular context, [*Col. 2 Lines 22-26*] [*Col. 3 Lines 32-40*].

means [Fig. 10] ("*position sensor 1035*") to detect the orientation of the apparatus from among the plurality of orientations [Col. 5 Lines 40-44],

communications means [Figs. 1 and 10] ("*bus 1039*") for communicating the detected orientation to a device ("*first electronic element 104*") [Col. 5 Lines 53-55], and

means for changing an operating state ("*operational mode*") of the device ("*first electronic element 104*") based on the detected orientation communicated to the device by the communication means ("*bus 1039*") [Col. 2 Lines 55-58],

wherein changing the operating state of the device (either "*landscape mode*" or "*portrait mode*" displayed on "*first electronic element 104*") [Col. 4 Lines 12-16] has no effect on an operating state of the apparatus ("*second electronic element 106*").

As to **claim 2**, Lenchik teaches the housing being a cube, triangular pyramid or a regular or irregular solid.

As to **claim 3**, Lenchik [Fig. 10] teaches the detection means ("*position sensor 1035*") corresponding to one or more sensors adapted to sense the orientation of the apparatus [Col. 5 Lines 40-44].

As to **claim 4**, Lenchik [Fig. 10] teaches the orientation being transmitted to the device by means of a cable ("*bus 1039*") [Col. 5 Lines 53-55].

As to **claim 5**, Lenchik [Fig. 13] teaches the orientation being communicated to the device by wireless means [Col. 6 Lines 23-35].

As to **claim 6**, Lenchik [Fig. 19] teaches the apparatus ("*second electronic element 106*") configured to identify one or more orientations with one or more corresponding contexts ("*landscape mode*" or "*portrait mode*") [Col. 4 Lines 12-16].

As to **claim 7**, Lenchik teaches the apparatus ("*second electronic element 106*") being a computer peripheral ("*keyboard*" or "*joystick*") of which the orientation corresponds to a specific user context ("*landscape mode*" or "*portrait mode*") when using a defined plurality of associated computers [Col. 3 Lines 48-57 and Lines 64-67].

As to **claim 8**, Lenchik teaches a device ("*first electronic element 104*") adapted to be responsive to a context detecting apparatus ("*second electronic element 106*") [Col. 4 Lines 12-15].

As to **claim 9**, Lenchik teaches the device is a personal computer ("*laptop*") adapted to switch between different operating states ("*landscape mode*" or "*portrait mode*") in response to the orientation of the context detecting apparatus [Col. 3 Lines 48-57].

As to **claim 10**, Lenchik teaches the different operating states including the personal computer ("*laptop*") going into standby, being locked, filtering, storing, buffering, setting authorization states or otherwise manipulating incoming email and/or messages [Col. 4 Line 67 – Col. 5 Lines 1-3].

As to **claim 11**, Lenchik teaches the different operating states corresponding to choice of software and desktop layout ("*landscape mode*" or "*portrait mode*") of the personal computer ("*laptop*").

As to **claim 12**, Lenchik [Fig. 1] teaches a device ("*second electronic element 106*") adapted to be configurable by a user to allow the definition of and switching between different operating states ("*operational mode*") [Col. 2 Lines 45-49] [Col. 2 Lines 55-58].

As to **claim 14**, Lenchik [*Fig. 1*] teaches a context detection ("*second electronic element 106*") system comprising:

a peripheral device ("*joystick*" or "*buttons used on laptop*"), adapted to output a signal corresponding to its orientation [*Col. 2 Lines 45-49 and Col. 3 Lines 48-57*], and

a computer ("*laptop*") communicatively connected to the peripheral device and adapted to change its operating state in response to the signal output by the peripheral device, thereby allowing the control of the operating state ("*operational mode*") of the computer based on the orientation of the peripheral device [*Col. 2 Lines 22-26, Lines 55-58, and Col. 4 Lines 12-15*],

wherein the operating state (either "*landscape mode*" or "*portrait mode*" displayed on "*first electronic element 104*") [*Col. 4 Lines 12-16*] of the computer has no effect on an operating state of the peripheral device ("*second electronic element 106*").

As to **claim 15**, Lenchik teaches a method of detecting user context, the method comprising the step of:

orienting, by a user, a context detection sensing means in a physical orientation corresponding to a chosen context [*Col. 2 Lines 55-58*],

communicating [*Figs. 1 and 10*], by the context detection sensing means ("*position sensor 1035*") to a device ("*first electronic element 104*"), the chosen context [*Col. 5 Lines 53-55*],

interpreting, by the device, the chosen context as communicated to the device by the context detection sensing means [*Col. 5 Lines 44-49*], and

modifying the behavior of the device ("*operational mode*") in accordance with the chosen context [*Col. 2 Lines 55-58*],

wherein the modifying of the behavior of the device has no effect on an operating state of the context detection sensing means.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over Lenchik in view of Saarinen (U.S. Pat. No. 6,882,335 B2, herein after referred to as "Saarinen").

Lenchik teaches the device to comprise means to control a second device in response to context information received from the context detecting apparatus [*Col. 3 Lines 64-67*].

Lenchik does not teach expressly the device the second device to correspond to at least one of a telephone and a speaker.

However, Saarinen [*Figs. 4(a) and 4(b)*] teaches a display apparatus comprising a display module and speakers ("*26a, 26b, and 26d*") [*Col. 8 Lines 22-35*] responding to the direction detected a direction sensing mean (*Fig. 5: "orientation detector 54"*) [*Col. 10 Lines 22-33*].

It would have been obvious to one of ordinary skill in the art at the time of the invention to specify Lenchik's second devices to be speakers as taught by Saarinen to reduce the number of speakers implemented in Lenchik's device which are operable in two display modes, portrait and landscape modes, thus to reduce the cost, weight, and volume of the display apparatus [*Col. 4 Lines 4-11*].

6. **Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Lenchik in view of Parker (U.S. Pat. No. 5,717,423, herein after referred to as "Parker").

Lenchik [*Figs. 1-8*] teaches the housing having a plurality of faces to allow a user to place the device ("*second electronic element 106*") at a particular orientation based on which the operating state ("*operational mode*") of the device is desired by the user [*Col. 2 Lines 45-49*].

Lenchik does not teach the housing being a cube.

However, since applicant has failed to disclose that having a cube-shaped housing provides an advantage, is used for particular purpose, or solves a state problem, it is an obvious matter of design choice to have a cube-shaped housing [*Pg. 3 Line 22*].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to specify Lenchik's housing be a cube, since any shaped object which can be oriented into a plurality of directions would perform equally well at placing the device in an unique orientation.

Lenchik does not teach an unique label provided on the faces of a cube.

However, Parker teaches a display device shaped a cube having a label on one of a plurality of the surfaces of the cube allowing the device to present visual and physical representation to the device user [*Abst. Lines 9-12*].

It would have been obvious to one of ordinary skill in the art at the time of the invention to include an unique label on each face of Lenchik as taught by Parker to allow Lenchik's device user to recognize visual and physical representation of each face of Lenchik, thus to allow the user to act to communicate with Lenchik's portable device upon the representation [*Abst. Lines 9-12*].

7. **Claim 17** is rejected under 35 U.S.C. 103(a) as being unpatentable over Lenchik and Parker as applied to claim 16 above, and further in view of Moskin et al. (U.S. Pat. No. 4,425,488, herein after referred to as "Moskin").

Lenchik does not teach expressly the detecting means utilizing conducting fluid to detect the orientation.

However, Moskin [*Figs. 6 and 7*] teaches a detecting means ("*switch 40*") implemented in a controller including conducting fluid ("*conducting fluid 87*") provided within the switch, wherein the conducting fluid closes one of a plurality of switches ("*contacts 75-81*") provided within the switch when the switch is positioned at a particular orientation, to thereby provide an electronic indication of the particular orientation [*Col. 4 Lines 51-63*].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Lenchik's detecting means to utilize conducting fluid to detect the orientation of the device as taught by Moskin to reduce the production cost for the

detecting means by reducing the number of electronic components required to build the detecting means.

8. **Claim 18** is rejected under 35 U.S.C. 103(a) as being unpatentable over Lenchik and Parker as applied to claim 16 above, and further in view of Cho (U.S. Pub. No. 2002/0142807 A1, herein after referred to as "Cho").

Lenchik modified by Parker does not teach setting means for enabling the user to set a plurality of different operating states for the device corresponding to each of the plurality of orientations of the apparatus.

However, Parker teaches setting means ("*processor 10*" or "*micro-controller 10*") for enabling the user to set a plurality of different operating states ("*transmitting first communication address*" or "*transmitting second communication address*") for the device ("*wireless communication device*") corresponding to each of the plurality of function keys ("*first input key*" or "*second input key*") [*claim 3*].

Since each of the plurality of function keys implemented in Parker is equivalent to each of the plurality of orientations of Lenchik in terms of function of changing operational mode of a device, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lenchik's device to have a function of setting a plurality of different operating states for the device corresponding to each of the plurality of orientations of the apparatus to allow the device user to access the preferred functions with a short operation of the device by configuring each orientation of the device to one of the preferred function.

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9. **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Lenchik in view of Cho.

Lenchik does not teach a method of enabling a user to set a plurality of different operating states for the device corresponding to each of the plurality of orientations of the context detection sensing means.

However, Parker [*Claims 3 and 8*] teaches a method comprising:

enabling a user to set, via a setup mode, a plurality of different operating means for the device corresponding to each of the plurality of keys, wherein the enabling step comprises:

associating one of the plurality of keys ("*a single input from a first input key*") with first operating state ("*transmitting the first communication address*")

associating one of the plurality of keys ("*a single input from a second input key*") with second operating state ("*transmitting the second communication address*")

repeatedly associating one of the plurality of keys ("*a single input from a third input key*" or "*a single input from a fourth input key*") with different operating states ("*transmitting the third communication address*" or "*transmitting the fourth communication address*")

Since each of the plurality of function keys implemented in Parker is equivalent to each of the plurality of orientations of Lenchik in terms of function of changing operational mode of a device, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lenchik's device to have a function of setting a plurality of different operating states for the device corresponding to each of the plurality

of orientations of the apparatus to allow the device user to access the preferred functions with a short operation of the device by configuring each orientation of the device to one of the preferred function.

Lenchik as modified by Parker does not teach expressly the method of assigning each orientation to correspond to different operating states of the device until all possible orientations have been assigned.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the method of setting each orientation to a different operational mode of the modified Lenchik's device until all possible orientations have been assigned, to allow Lenchik's device user to access the maximum number of preferred functions by the change of the orientations of the device.

Response to Arguments

10. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seokyun Moon whose telephone number is (571) 272-5552. The examiner can normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). March 17, 2006 [S.M.] Division 2629

AMR A. AWAD
PRIMARY EXAMINER
Amr A. Awad